

Application No.: 10/617,585  
Docket No.: FA1048USNA  
Confirmation No.: 3692

### **Remarks/Arguments**

Each rejection and objection is addressed under original subject and numeric heading set forth in the Office Action.

### **Claim Status**

Claims 1, 3, 5-17, 19-21 and 26-30 are pending. Claims 2, 4 and 22-25 are withdrawn. Claim 18 is canceled.

Claims 1, 26, 29, and 30 are currently amended.

### **Claim rejections 35 USC §112**

*4. Claims 1, 3, 5-11, 13-16, 18-21, 26-30 are rejected under 35 USC 112 First paragraph.*

Claims 1 and 26 are amended as shown in the Listing of Claims. Applicants submit that the amendments overcome the rejections to these claims. Support for the amendments can be found on page 6, lines 6 to 8, and page 6, lines 23 to 29, of the specification as originally filed. Applicants submit that no new matter is introduced in current amendments.

Claims 3, 5-11, 13-16, 18 (canceled previously) and 19-21 are dependent from claim 1. Claims 27-30 are dependent from claim 1 or 26. Limitations in the amended claims 1 and 26 are read into these claims. Applicants submit that the amendments also overcome the rejections to these claims.

### **Claim Rejections – 35 USC § 102**

*6. Claims 1, 3, 5-11, 13-16, 18-21 and 26-30 are rejected under 35 USC 102(b) as being anticipated by Hintze-Bruning et al., US 6,297,314.*

Hintze-Bruning et al describe polyacrylate resins obtainable by polymerizing monomers. Generic mixed monomer combinations are disclosed in (a1) through (a6) (Col. 5, line 11 to Col. 8, line 10, Hintze-Bruning et al). There is no specific disclosure in Hintze-Bruning et al on the polymer polymerized from

the monomer combination in the monomer mixture as required in the amended claim 1. Further, there is no disclosure on the percentage of monomers in the monomer mixture “that includes **100% to 80%** of the total amount of the **non-functional acrylate** monomers and the **functional methacrylate** monomers, percentage being in weight percentage based on the weight of the monomer mixture”.

In fact, Hintze-Bruning et al specifically disclose an acrylate resin in examples that is polymerized from a monomer mixture having **48%** of the sum of **non-functional acrylates** and **functional methacrylates** (Cardura® E10 and hydroxylethyl methacrylate). The monomer mixture in Hintze-Bruning et al is therefore different from what is required in the amended claims. The monomer mixture in Hintze-Bruning et al has over 52% of the sum of functional acrylates, non-functional methacrylates and other monomers (acrylic acid, methyl methacrylate, and styrene) (Col. 13, lines 17 – 35, Hintze-Bruning et al).

Since Hintze-Bruning et al fail to teach each and every elements of the instant invention as set forth in the amended claim, Applicants submit that the amendments overcome the rejections to claim 1.

Claims 3, 5-11, 13-16, and 19-21 are dependent from claim 1. Limitations in the amended claim 1 are read into these claims. Applicants submit that the amendments also overcome the rejections to these claims. Claim 18 was canceled previously.

Claim 14 is further different from Hintze-Bruning et al in that Hintze-Bruning et al disclose a polymer polymerized from a monomer mixture having 18% non-functional methacrylate monomers (250.7 parts of methyl methacrylate in 1378.5 parts of total monomers, Col. 13, line 24, Hintze-Bruning et al), which is out side the range of 0.01% to 10% required in claim 14. Hintze-Bruning et al fail to teach each and every elements of claim 14.

Claim 26 is amended as set forth in the Listing of Claims. Claim 26 is different from Hintze-Bruning et al in that Hintze-Bruning et al disclose a polymer polymerized from a monomer mixture having 18% non-functional methacrylate

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monomers (250.7 parts of methyl methacrylate in 1378.5 parts of total monomers, Col. 13, line 24, Hintze-Bruning et al), which is out side the range of 0.01% to 10% required in these claims. Further, as mentioned above, Hintze-Bruning et al fail to teach the monomer combination and further fail to teach the percentage of the monomer mixture. Since Hintze-Bruning et al fail to teach each and every elements of claim 26, Applicants submit that the amendments overcome the rejections to this claim.

Claims 27-30 are dependent from claim 1 or 26. Limitations in the amended claims 1 and 26 are read into these claims. Applicants submit that the amendments also overcome the rejections to these claims.

#### ***Claim Rejections – 35 USC § 103***

8. *Claim 12 is rejected under 35 USC 103(a) as being unpatentable over Hintze-Bruning et al., US 6,297,314 in view of Roester et al. (US2003/0232942).*

As mentioned above, Hintze-Bruning et al describe polyacrylate resins obtainable by polymerizing monomers from mixed monomers. Hintze-Bruning et al fail to teach the polymer polymerized from the monomer combination in the monomer mixture as required in the amended claim 1. Further, Hintze-Bruning et al fail to teach the percentage of monomers in the monomer mixture as set forth in the amended claim 1.

In fact, Hintze-Bruning et al specifically teach an acrylate resin polymerized from a monomer mixture having **48%** of the sum of **non-functional acrylates** and **functional methacrylates** (Cardura® E10 and hydroxylethyl methacrylate) and over **52%** of the sum of functional acrylates, non-functional methacrylates and other monomers (acrylic acid, methyl methacrylate, and styrene) (Col. 13, lines 17 – 35, Hintze-Bruning et al). Therefore, Hintze-Bruning et al teach away from the instant invention that require the percentage of monomers as set forth in the amended claim 1.

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Thus, based on the teaching in Hintze-Bruning et al, it would not have been obvious to those of ordinary skill in the art to arrive at the instant invention at the time the invention was made.

Roesler et al also fail to teach the combination of the monomers and the percentage of the monomer mixture.

In combination, both Hintze-Bruning et al and Roesler et al fail to teach the combination of the monomers and the percentage of the monomer mixture.

Claim 12 is dependent from claim 1. Limitations in amended claim 1 are read into claim 12. The aforementioned reasoning and observations are equally applicable to claim 12. Based on the reasoning and observations above, Applicants submit that the amendments overcome the rejections to claim 12.

*9. Claim 17 is rejected under 35 USC 103(a) as being unpatentable over over Hintze-Bruning et al., US 6,297,314 in view of Gupta et al (US 6,867,250).*

Claim 17 is dependent from claim 1. Limitations in amended claim 1 are read into claim 17. The aforementioned reasoning and observations related to claim 1 are equally applicable to claim 17.

Gupta et al also fail to teach the combination of the monomers and the percentage of the monomer mixture.

In combination, both Hintze-Bruning et al and Gupta et al fail to teach the combination of the monomers and the percentage of the monomer mixture.

Based on the reasoning and observations above, Applicants submit that the amendments overcome the rejections to claim 17.

## **Conclusion**

Applicants respectfully submit that the claim amendments and the distinguishing observations concerning the references overcome the rejections maintained in the Office Action.

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In view of the foregoing, allowance of the pending claims is respectfully requested.

Respectfully submitted,

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